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Application No. 10/799,652 Attorney Docket No. 2557SI-001272/US

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of claims including the claim

amendments proposed by the Examiner. Please note the updated status identifier in

parenthesis, underlined text indicating insertions, and strike through and/or double-

bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A baking system including a plate for receiving a wafer

to be baked, a heater for heating the plate, and a cooling apparatus for cooling the

plate, the cooling apparatus comprising:

a heatpipe <del>adapted to</del> cool<u>ing</u> the plate using vaporization of a coolant in the

heatpipe, the heatpipe being external to the plate and being arranged in proximity to

the plate, the heatpipe and the plate being discrete elements, and the heater being

disposed between the heatpipe and the plate.

a coolant storage tank <del>adapted to supply</del> <u>supplying</u> the coolant into the

heatpipe when the plate is cooled and to-store  $\underline{\text{storing}}$  the coolant supplied to the

heatpipe when the plate is heated; and

a thermostatic element adapted to maintaining an approximately constant

temperature of the coolant supplied into the heatpipe when the plate is cooled.

2. (Previously Presented) The baking system as claimed in claim 1, wherein the

coolant storage tank comprises a coolant flowing element for flowing the coolant into

the heatpipe when the plate is cooled.

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3. (Previously Presented) The baking system as claimed in claim 1, wherein the

thermostatic element comprises:

a cooling water storage tank for circulating cooling water through the heatpipe;

and

a cooling water supply pipeline, which is a path of the cooling water, that

extends into the heatpipe and provides flow communication between the heatpipe and

the cooling water storage tank.

4. (Previously Presented) The baking system as claimed in claim 3, wherein the

cooling water supply pipeline has a valve between the cooling water storage tank and

the heatpipe.

5. (Previously Presented) The baking system as claimed in claim 1, further

comprising a coolant supply pipeline for providing flow communication between the

coolant storage tank and the heatpipe.

6. (Previously Presented) The baking system as claimed in claim 5, wherein the

coolant supply pipeline has a valve between the coolant storage tank and the heatpipe.

7. (Previously Presented) The baking system as claimed in claim 1, wherein the

heatpipe includes a ceiling portion and internal side portions.

8.-9. (Cancelled)

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- 10. (Original) The baking system as claimed in claim 2, wherein the coolant flowing element is a heater disposed adjacent to the coolant storage tank.
- (Original) The baking system as claimed in claim 2, wherein the coolant flowing element is a heater integrated with the coolant storage tank in a single body.
- 12. (Previously Presented) The baking system as claimed in claim 7, wherein the heatpipe comprises a wick on the ceiling portion and a wick on the internal side portions of the heatpipe.
- 13. (Previously Presented) The baking system as claimed in claim 12, wherein the wick on the ceiling portion and the wick on the internal side portions of the heatpipe has a linear shape, a spiral shape or a radial shape.
- 14. (Previously Presented) The baking system as claimed in claim 13, wherein the wick on the ceiling portion has a different shape than the wick on the internal side portions of the heatpipe.
- 15. (Original) The baking system as claimed in claim 7, further comprising: a wick plate having a plurality of planar wicks installed on the ceiling portion of the heatpipe; and

a wick formed on the internal side portions of the heatpipe to guide the coolant to flow toward the wick plate.

16. (Previously Presented) The baking system as claimed in claim 15, wherein the wick formed on the internal side portions of the heatpipe has a linear shape, a spiral shape or a radial shape.

## 17. (Cancelled)

18. (Previously Presented) The baking system as claimed in claim 7, further comprising a wick plate installed on the ceiling portion and a wick plate installed on the internal side portions of the heatpipe.

## 19.-20. (Cancelled)

- 21. (Original) The baking system as claimed in claim 1, wherein the coolant is selected from the group consisting of acetone, methanol, water, and distilled water.
- 22. (Previously Presented) The baking system as claimed in claim 1, wherein the thermostatic element extends along a bottom surface of the heatpipe inside the heatpipe, the bottom surface facing away from the heater, and the thermostatic element being substantially submerged in the coolant when the coolant is supplied to the heatpipe.
- 23. (Previously Presented) The baking system as claimed in claim 22, wherein the heater extends along an entire top surface of the heatpipe, the heater being external with respect to the heatpipe, and the bottom and top surfaces of the heatpipe being opposite each other.

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24. (Previously Presented) The baking system as claimed in claim 1, further

comprising a wick on an inner surface of the heatpipe, the wick being arranged to be

substantially submerged in the coolant inside the heatpipe.

25. (Previously Presented) The baking system as claimed in claim 2, wherein

the coolant flowing element is adapted to control coolant flow by varying pressure.

26. (Currently Amended) The baking system as claimed in claim 1, further

comprising a coolant supply pipeline configured to provide providing flow

communication between the coolant storage tank and the heatpipe, wherein the

coolant storage tank is <del>configured to receive</del> receiving the coolant from the heatpipe

via the coolant supply pipeline and the heatpipe is configured to receive receiving the

coolant from the coolant storage tank via the coolant supply pipeline.

27. (Previously Presented) The baking system as claimed in claim 3, wherein at

least a portion of the coolant is liquid coolant and the cooling water supply pipeline is

substantially submerged in the liquid coolant portion when the coolant is supplied to

the heatpipe.

<End of Claims Listing>

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